

# **Practice Guidelines for the Treatment of the HIV Positive Patients in General Dentistry**

Endorsed by  
the Dental Steering Committee Pacific AETC &  
The LA County Commission on HIV Health Services Standards of Care

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# Other Resources

- Dental Management of the HIV-infected Patient, Supplement to JADA, American Dental Association, Chicago, 1995.
- Clinician's Guide to Treatment of HIV-infected Patients, Academy of Oral Medicine, 3rd Edition, Ed. Lauren L. Patton, Michael Glick, New York, 2002.
- Principles of Oral Health Management for the HIV/AIDS Patient, A Course for Training the Oral Health Professional, Department of Human Services, Rockville, Maryland, 2001.

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# CD4 Count, Viral Load & Dental Care

- For the dentist, the CD4 count indicates the immune status of the patient
- The magnitude of the viral load is **not an indicator to withhold dental treatment** for the patient
- High viral loads may be present in a patient with early asymptomatic disease, while low viral loads can be seen in very advanced patients on suppressive antiviral therapy
- Knowledge of these markers can tell the dentist the **general health** of the patient and the **risk of progression**
- The dentist can play an important part in reminding patients of the need for regular follow up and monitoring of these markers.
  - It is recommended that the CD4 and viral load determinations be done **at least every three months**

# Antibiotic Prophylaxis

- There are no data supporting the need for routine antibiotic coverage to prevent bacteremia or septicemia arising from dental procedures
- Prophylactic antibiotics should not be prescribed routinely for the dental visit when the HIV infection is well controlled



# Antibiotic Prophylaxis Is Indicated

- If a patient with a neutrophil count **below 500 cells/mm<sup>3</sup>** requires procedures likely to cause bleeding and bacteremia and is not already taking antibiotics for prophylaxis against opportunistic infections
- Consult Pt's physician regarding the need for antibiotic prophylaxis for dental procedures

# Medical Assessment

- It is the standard of care to ask the patient about any health conditions, and to collect information about the status of each condition; update regularly
- It is also the standard of care to ask the physician to confirm or provide more complete medical information to that already obtained from the patient if needed
- The dental health provider should use the medical history and laboratory test results to decide if treatment should occur in a hospital setting. Such a decision should be made in consultation with the patient's physician



# Laboratory tests

- Hematologic abnormalities may occur in the course of HIVD progression and with opportunistic infections
- Some routine laboratory tests prior to extensive surgical intervention should be obtained
  - Complete Blood Count CBC (Red Blood Cell Count, White Blood Cell Count, differential count), Platelet Count, Hemoglobin level, Hematocrit and coagulation tests
- Although having access to laboratory tests for HIV positive patients is helpful to the dental provider, it is not always necessary for many routine procedures

# Treatment Considerations

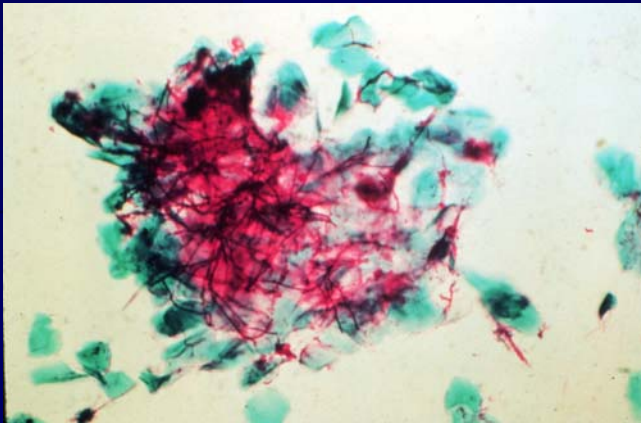
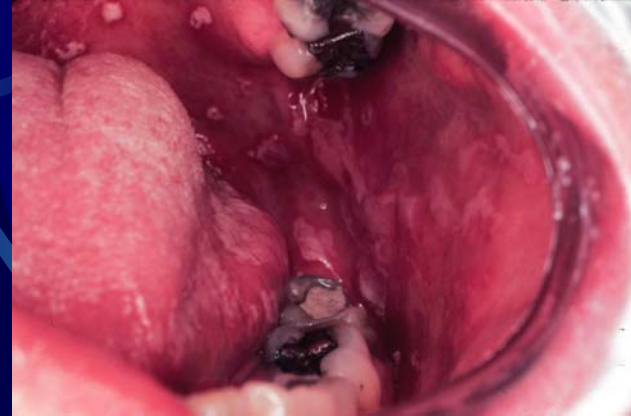
- Bleeding tendencies may determine whether or not to recommend full mouth scaling and root planning or multiple extractions in one visit
- In severe cases, patients may be treated more safely in a hospital environment where blood transfusions are available
- Deep block injections should be avoided in patients with a recent history or laboratory results indicating bleeding tendencies
- The ability to withstand treatment for an extended amount of time & the ability to return for sequential visits should be ascertained
- A pre-treatment antibacterial mouth rinse may be indicated

# Treatment Considerations

- A six-month recall schedule should be instituted to monitor any oral changes. For severely immunosuppressed Pts (i.e. CD-4 count of  $<100$ ), a three-month interval should be considered
- Patients exhibiting oral lesions should be assessed in a timely manner
- When reduced salivary function is present, the patient should be closely monitored for caries, periodontitis, soft tissue lesions and salivary gland disease
- Fluoride supplements in the form of a rinse and/or toothpaste should be encouraged for those with increased caries and dry mouth
- A proactive attitude and an emphasis on prevention should be encouraged

# FUNGAL INFECTION

- **Candidiasis**
  - Pseudomembranous
  - Erythematous
  - Angular cheilitis
- **Geotrichosis**
- **Cryptococcosis**
- **Histoplasmosis**





# Periodontal Manifestations

- LINEAR GINGIVAL ERYTHEMA **LGE** (HIV-G)
- NECROTIZING ULCERATIVE GINGIVITIS **(NUG)**
- NECROTIZING ULCERATIVE PERIODONTITIS **NUP** (HIV-P)



# Viral Infections

- HBV
- HSV
- HZV
- HPV





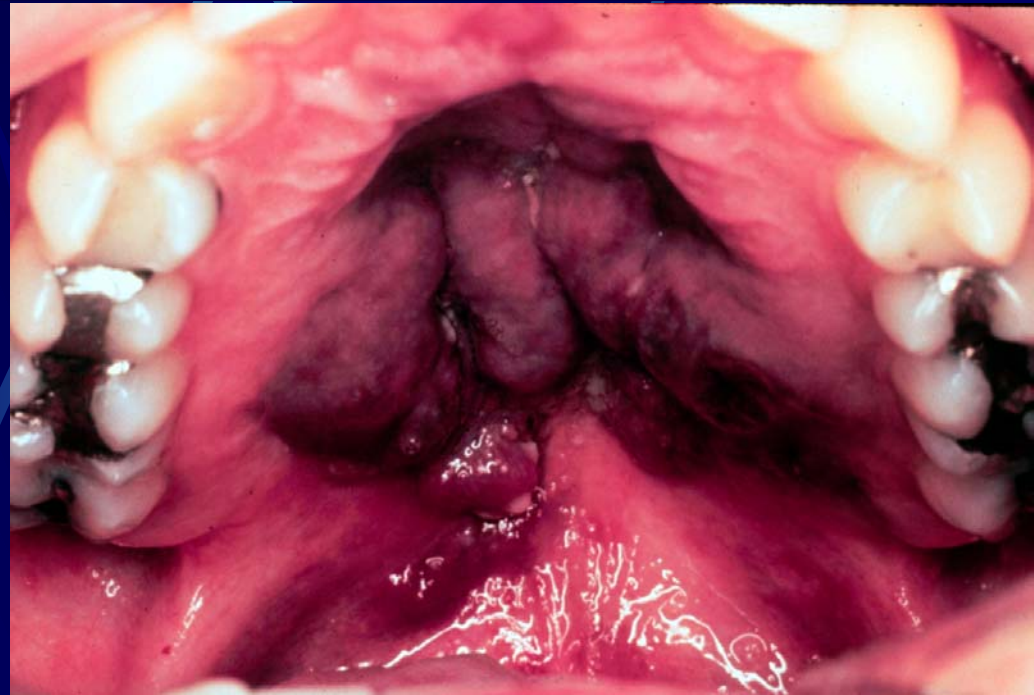
# APHTHOUS ULCERS

- Consist of minor, herpetiform & major aphthous ulcers
- Ulcers of major type correspond w/ severe immune suppression
- Seen usually on non-keratinized mucosa



# NEOPLASMS

- Kaposi's sarcoma
- Non-Hodgkin's lymphoma
- Squamous cell carcinoma



- Recent studies show a significant reduction in the incidence rate of many HIV-associated oral conditions except for **salivary gland diseases** and **oral warts**
- In all studies there is a correlation between the prevalence of oral lesions and **low CD4** count as well as **high viral load**

- **Dental practitioners must understand that most HIV positive patients, even symptomatic, can be treated safely in a typical dental office or clinic**

# HIV Testing and Counseling

- As of July 1, 2002, HIV is a reportable communicable disease in the State of California. It requires reporting to the State Office of AIDS, according to the California Code of Regulation (Title 17, Division 1, Chapter 4, Subchapter 1, Article 3.5)
- Health care providers who willfully neglect or refuse to report in accordance with the regulation are guilty of a misdemeanor under Health Safety Code section 100182 and may be subject to prosecution
- A Dentist may be held legally liable if a patient who has a lesion with unknown etiology needs referral in order to rule out possible HIV etiology, and the referral for testing and counseling is not done



# Discrimination & Legal Issues

- Referrals to a specialist or to a hospital setting must always be based on the clinical needs of the patient, not the ignorance or fear of the dentist, staff or other patients
- It is a violation of the Americans with Disabilities Act, California law, and the law of some local jurisdictions, and of the ethical standards of the California Dental Association and the American Dental Association to **refuse to care for patients with HIV because of fear of the risk of infection**
- In CA post exposure protocol for any kind of exposure (e.g. needlestick, splash, puncture, bite, etc.) allows the dentist to request that the patient be tested for HIV



# Privacy

- Many patients are reluctant to disclose HIV status to the dentist because they fear discrimination
  - Even when they understand that full disclosure is essential for providing the best possible care
- Dentists can establish an atmosphere in which patients feel comfortable in disclosing their status
  - Indicate on the medical intake form that patients are not discriminated against on the basis of disability, and that all medical information disclosed is confidential
- Dentists are responsible for training staff to ensure that *all* patient information is kept confidential and is in accordance with all state laws

# Infection Control Issues

- Hepatitis B vaccination
- Hepatitis C exposure management
- Post-Exposure prophylaxis (PEP) for HIV exposure
  - Basic regimen
  - Expanded regimen
  - Monitoring adverse drug reactions

# **Risk of Infection Following Parenteral Exposure Involving A Seropositive Source Patient**

**HBV: 6% to 29%**

**HCV: 1% to 3%**

**HIV: 0.2 to 0.3%**

# Nutritional Counseling

Areas of concern:

- Poor oral intake of food or fluid
  - Oral signs of nutritional deficiency
- Difficulty chewing and swallowing due to oral dryness or continuous mouth sores resulting from opportunistic infections, aphthous ulcers, etc
- Severe dental caries
- Changes in perception of taste or smell
- Patient complaints of economic inability to meet caloric and nutrient needs

# Medications In HIV

- long-term clinical data on drug interactions does not exist for many of the newer medications
- Some patients may suffer from photophobia
- Some patients are likely to suffer from xerostomia, oral ulcers or neurological changes
- No known drug interactions between antiretrovirals and local anesthetics used in general dentistry
- Pay attention to all drug side effects

# Websites of Interest to Dentists

- **American Dental Association**  
<http://www.ada.org/>
- **Dental Alliance for AIDS Care (DAAC)**  
<http://www.critpath.org/daac>
- **HIVdent**  
<http://www.hivdent.org/>
- **National Institute of Dental & Craniofacial Research**  
<http://www.nidr.nih.gov/>
- **Oral AIDS Center at UCSF**  
<http://itsa.ucsf.edu/~ucstoma/oac.html>
- **University of Southern California AIDS Education and Training Center**  
[http://www.usc.edu/hsc/medicine/family\\_med/aetc/index.html](http://www.usc.edu/hsc/medicine/family_med/aetc/index.html)
- **American Nursing Association Safe Needles Save Lives**  
[www.needlestick.org](http://www.needlestick.org)
- **The Internet drug index**  
[www.rxlist.com](http://www.rxlist.com)